

	Application Number	10/775,702
	Filing Date	February 9, 2004
	First Named Inventor	Ikuya Yagisawa
	Art Unit	2187
	Examiner Name	Matthew A. Bradley
	Attorney Docket Number	16869N-104800US

ENCLOSURES (Check all that apply)		
<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation <input type="checkbox"/> Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): USPTO forms SB08A & SB08B (two page), copies of 6 cited references, Return Postcard
Remarks: The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Name	Townsend and Townsend and Crew LLP		
Signature			
Printed name	Chun-Pok Leung		
Date	11-17-05	Reg. No.	41,405

CERTIFICATE OF TRANSMISSION/MAILING			
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Signature			
Typed or printed name	Roger Hyton	Date	11/18/05

NOV 21 2005

PTO/SB/17 (12-04)

Effective on 12/08/2004.
Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL

For FY 2005

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ 180

Complete if Known

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Attorney Docket No.	16869N-104800US

METHOD OF PAYMENT (check all that apply)

☐ Check
 ☐ Credit Card
 ☐ Money Order
 ☐ None
 ☐ Other (please identify): _____

☒ Deposit Account
 Deposit Account Number: 20-1430
 Deposit Account Name: Townsend and Townsend and Crew LLP

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

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☒ Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17
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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Small Entity	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fee (\$)	
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Small Entity	
	Fee (\$)	Fee (\$)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)** **Multiple Dependent Claims**
 _____ -20 or HP = _____ x _____ = _____
 Fee (\$) Fee Paid (\$)
 HP = highest number of total claims paid for, if greater than 20

Indep. Claims **Extra Claims** **Fee (\$)** **Fee Paid (\$)**
 _____ -3 or HP = _____ x _____ = _____
 HP = highest number of independent claims paid for, if greater than 3

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets **Extra Sheets** **Number of each additional 50 or fraction thereof** **Fee (\$)** **Fee Paid (\$)**
 _____ - 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____


4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other: Submission of Information Disclosure Stmt

Fees Paid (\$)
180

SUBMITTED BY

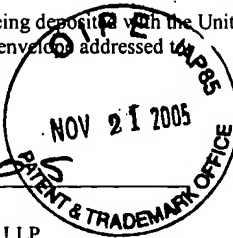
Signature		Registration No. (Attorney/Agent) 41,405	Telephone 650-326-2400
Name (Print/Type)	Chun-Pok Leung		Date 11-17-05

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TOWNSEND and TOWNSEND and CREW LLP

By:

[Signature]
Robert J. Hyatt

PATENT
Attorney Docket No.: 16869N-104800US
Client Reference No.: NT1254US

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Ikuya YAGISAWA et al.

Application No.: 10/775,702

Filed: February 9, 2004

For: ARRAY-TYPE DISK APPARATUS
PREVENTING DATA LOST WITH
TWO DISK DRIVES FAILURE IN THE
SAME RAID GROUP, THE
PREVENTING PROGRAMMING AND
SAID METHOD

Examiner: Matthew A. Bradley

Art Unit: 2187

SUPPLEMENTAL INFORMATION
DISCLOSURE STATEMENT UNDER 37
CFR §1.97 and §1.98

11/22/2005 HGUTEMA1 00000017 201430 10775702

01 FC:1806 180.00 DA

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the cited non-patent references are enclosed.

It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.


As provided for by 37 CFR §1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no

representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

This IDS is being filed before the mailing date of the final Office Action or Notice of Allowance.

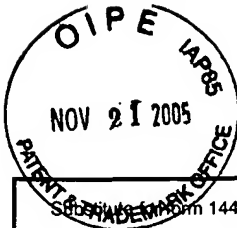
Please charge the IDS fee of \$180 to Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Chun-Pok Leung
Reg. No. 41,405

TOWNSEND and TOWNSEND and CREW LLP
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San Francisco, California 94111-3834
Tel: 650-326-2400
Fax: 650-326-2422
RL:rn



PTO/SB/08A (08-03)

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known	
			Application Number	10/775,702
			Filing Date	February 9, 2004
			First Named Inventor	Ikuya Yagisawa
			Art Unit	2187
			Examiner Name	Matthew A. Bradley
Sheet 1	of 2	Attorney Docket Number	16869N-104800US	

U.S. PATENT DOCUMENTS+					
Examiner Initials*	Cite No.	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code ² (if known)			
	1	2005/0060618	03-17-2005	Guha	
	2	2004/0260967	12-23-2004	Guha et al.	
	3	2004/0190183	09-30-2004	Tamai et al.	
	4	6,799,283	09-28-2004	Tamai et al.	
	5	2004/0160975	08-19-2004	Frank et al.	
	6	6,598,174	07-22-2003	Parks et al.	
	7	2003/0120863	06-26-2003	Lee et al.	
	8	2003/0120864	06-26-2003	Lee et al.	
	9	2003/0120869	06-26-2003	Lee et al.	
	10	2003/0101316	05-29-2003	Krishnamurthy	
	11	2002/0066050	05-30-2002	Lerman et al.	
	12	6,154,853	11-28-2000	Kedem	
	13	6,044,444	03-28-2000	Ofek	
	14	5,974,544	10-26-1999	Jeffries et al.	
	15	5,959,860	09-28-1999	Styczinski	
	16	5,802,264	09-01-1998	Chen et al.	
	17	5,267,242	11-30-1993	Lavallee et al.	
	18	5,537,567	07-16-1990	Galbraith et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				

Examiner Signature		Date Considered	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.
60637533 v1

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Complete if Known		
			Application Number	10/775,702	
			Filing Date	February 9, 2004	
			First Named Inventor	Ikuya Yagisawa	
			Art Unit	2187	
			Examiner Name	Matthew A. Bradley	
Sheet	2	of	2	Attorney Docket Number	16869N-104800US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	19	ALVAREZ et al. " Tolerating multiple failures in RAID architectures with optimal storage and uniform declustering," Proceedings of the 24th annual international symposium on Computer architecture pp. 62-72 (1997).	
	20	COHEN et al. "Segmented information dispersal (SID) for efficient reconstruction in fault-tolerant video servers," Proceedings of the fourth ACM international conference on Multimedia pp.277-286 (1997).	
	21	HOU " Comparing rebuild algorithms for mirrored and RAID5 disk arrays," Proceedings of the 1993 ACM SIGMOD international conference on Management of data pp. 317-326 (1993).	
	22	MENON et al. "Comparison of sparing alternatives for disk arrays," Proceedings of the 19th annual international symposium on Computer architecture pp. 318-329 (1992).	
	23	MOGI et al. "Hot mirroring: a method of hiding parity update penalty and degradation during rebuilds for RAID5," Proceedings of the 1996 ACM SIGMOD international conference on Management of data pp. 183-194 (1996).	
	24	MUNTZ et al. "Performance Analysis of Disk Arrays Under Failure," Proceedings of the 16th Conference on Very Large Databases (VLDB) pp.162-173 (1990).	

Examiner Signature		Date Considered	
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* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.